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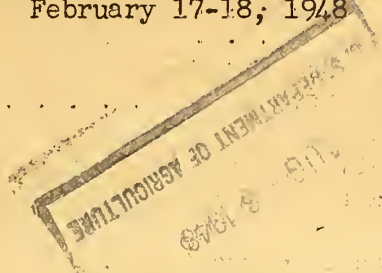
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REPORT

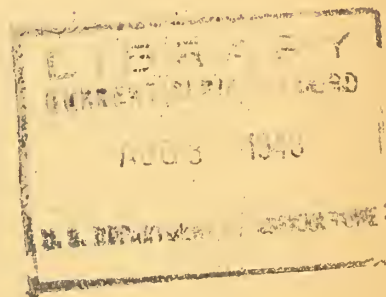
of the

FOURTH NORTHEASTERN CORN IMPROVEMENT CONFERENCE

New Brunswick, New Jersey  
February 17-18, 1948



Reported by  
Merle T. Jenkins, Secretary



✓ Division of Cereal Crops and Diseases  
✓ Bureau of Plant Industry, Soils, and Agricultural Engineering  
Plant Industry Station, Beltsville, Md.  
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REPORT OF THE FOURTH NORTHEASTERN CORN IMPROVEMENT CONFERENCE

New Brunswick, New Jersey  
February 17-18, 1948

Reported by Merle T. Jenkins <sup>1/</sup> Secretary

AFTERNOON MEETING, TUESDAY, FEBRUARY 17

The 1948 meetings of the Northeastern Corn Improvement Conference were held in the Administration Building of the New Jersey Agricultural Experiment Station. Due to difficulty some members previously had experienced in reaching New Brunswick prior to noon, the meeting time was delayed until after noon.

The meeting was called to order by Chairman R. G. Rothgeb at 1:00 p.m. The afternoon discussions were concerned largely with the arrangements for the 1948 and 1949 uniform tests of single crosses and double crosses. The discussions on each uniform test are summarized below.

U. S. 13 Maturity

Dr. J. C. Anderson reported on the seed supplies of the single crosses of U. S. 13 maturity produced by R. G. Rothgeb and himself. The inbred lines used as parents of these singles are listed below:

L317	K155
Pa 109	Hy2
C102	Oh7A
C103	WF9
38-11	

The Pennsylvania line Pa29 also was used as a parent but it was decided to eliminate the singles involving this line. Dr. Anderson estimated that available seed supplies would permit tests of three replications at each of five locations. Tests were tentatively assigned to Pennsylvania, New Jersey, Maryland, Delaware, and Connecticut.

Dr. Rothgeb agreed to prepare and distribute the seed for these tests.

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1/ Principal Agronomist, Division of Cereal Crops and Diseases, Plant Industry Station, Beltsville, Maryland.



W412 Maturity

The following inbred lines were used as parents of the single crosses of W412 maturity:

W9	NY3
Ia. 153	Pa28
W28	MS19
W-M13	C105
Pa 11	A158

Seed of the singles among the above lines was to have been produced by L. L. Huber in Pennsylvania and R. G. Wiggans in New York. Dr. Huber reported that his crossing plot was a complete failure and Dr. Wiggans indicated that only limited quantities of seed were obtained in New York. Available seed supplies were inadequate to permit testing this group of single crosses in 1948.

A discussion arose as to the best procedure to be followed in making detailed arrangements for each of the uniform tests of single crosses. It had become evident that time would not be available for the entire conference to undertake the selection of the inbred lines that should be included in each maturity group. W. R. Singleton, therefore,

MOVED: That committees be appointed to select the lines and take over the responsibility for each of the maturity groups of single crosses decided upon by the Conference.

Seconded and passed.

The conference next proceeded to discuss the various maturity groupings of single crosses which would adequately cover the interests of the Northeastern section. After some little discussion the following maturity groups were selected and committees to supervise tests in each maturity were appointed by the Chairman. These are indicated below:

W240 - H. M. Yegian, Chairman (Mass.) and R. M. Bailey (Maine)

W335)- L. L. Huber, Chairman (Pa.), R. G. Wiggans (N.Y.), and  
W412) H. M. Yegian (Mass.)  
M15 )

K24 )- J. L. Cartledge, Chairman (W. Va.) and  
Ia. 4059) H. L. Everett (Conn.)

U. S. 13 - J. C. Anderson, Chairman (N. J.), R. G. Rothgeb (Md.)  
and H. L. Everett (Conn.)

M. T. Jenkins then discussed the action taken by the North Central Corn Improvement Conference at their Cincinnati meeting in November. The North Central Conference had directed that temporary experimental designations be assigned to the double crosses predicted from the uniform tests. Dr. Jenkins outlined the numbering system which he indicated he had planned to use in assigning these temporary designations. The system contemplated

the use of four-digit numbers. The first or left-hand digit would indicate the year when the uniform test used as a basis for the predictions was conducted; the second digit would indicate general maturity by indicating the uniform test that was involved in the predictions. The tests would be numbered in order, beginning with the earliest maturity. The two right-hand digits would be used to number the 90 highest-yielding doubles in the order of their predicted yields.

The advantages and disadvantages of the assignment of temporary designations and the merit of the proposed numbering system were discussed in considerable detail. It finally was agreed that temporary experimental numbers should be assigned to the double crosses predicted from the uniform tests sponsored by the Northeastern Conference. In order to provide for possible future development of hybrids both earlier and later than those now available it was decided to allow for one maturity grouping earlier than Wis. 240 and one later (of Ill. 448 maturity) than U. S. 13.

The question of designating white hybrids was raised and it was suggested that the suffix "W" be used to indicate white hybrids.

#### K24 Maturity

Seed of the single crosses of Ohio K24 maturity was produced by J. L. Cartledge in West Virginia and H. L. Everett in Connecticut. The inbred lines used as parents of these crosses are listed below:

Oh40B	W24
W22	WF9
W20	Oh33
B8	W-R3
Pa 109	Oh51A

Seed supplies were reported to be very limited and it was decided that the assignment of the available supply should be undertaken by the committee having responsibility for this maturity group.

#### Ia. 4059 Maturity

Seed of the single crosses of Iowa 4059 maturity was produced by H. L. Everett in Connecticut. The following lines were used as parents of these singles:

W24	Pa55
Hy	Oh51A
I205	R2
L289	W22
Oh56A	

Mr. Everett indicated that seed supplies were adequate for tests at 3 locations and tests were assigned to Pennsylvania, Connecticut, and West Virginia.

### Uniform Test of Double Crosses

H. L. Everett indicated that the Connecticut station would assemble and analyze the data for the 1948 uniform test of double crosses of U. S. 13 maturity as has been their practice in the past. The need for uniform tests of double crosses of other maturities was discussed. It was decided to assign the responsibility of arranging for uniform tests of predicted double crosses of additional maturities to the committee responsible for the tests of single crosses of comparable maturity.

#### K24 Maturity (Pennsylvania)

L. L. Huber indicated that seed of a group of single crosses had been produced in Pennsylvania among inbred lines of K24 maturity. The following lines were used as parents:

Pa 109	Oh51
Oh33	W22
B8	Pa74
Oh43	Pa 104
WF9	

Seed supplies were available for only two tests and these were assigned to Pennsylvania and Ohio.

### 1947 Uniform Test of Double Crosses

Chairman Rothgeb called on H. L. Everett to present the results of the 1947 uniform tests of double crosses of U. S. 13 maturity. Mr. Everett distributed a mimeographed summary of the 1947 results. He called attention to the fact that except for Ohio C92, there has been very good agreement in the ranking of the entries included in the tests in the three different seasons. There was considerable discussion on suitable methods of reporting data, particularly lodging data.

### Uniform Designations for Northeastern Hybrids

The next item brought up for discussion was that of assigning a uniform name to the cooperative hybrids developed through the Northeastern Corn Improvement Conference. Chairman Rothgeb called on J. C. Anderson for a report of the Committee on the Uniform Designation of Hybrids. Dr. Anderson read the committee report contained on pages 22-24 of the 1946 Report of the Northeastern Corn Improvement Conference. He indicated that this report had been accepted by the Northeastern directors at Philadelphia. All that remained, therefore, was for the Conference to agree upon a suitable uniform name for hybrids developed in the cooperative program. After a brief discussion, C. E. Phillips

MOVED: That the Conference adopt "Yankee" as a uniform name for Northeastern hybrids.

Motion seconded.

Considerable discussion developed as to the suitability of "Yankee" for a regional designation. The majority sentiment was rather strongly



against the adoption of this designation. The motion and second, therefore, were withdrawn.

In the course of the discussions the following names were suggested for further consideration:

Eastland  
Yankee  
NorEast  
Eastern

After detailed consideration of the relative merits of each of these names, W. R. Singleton

MOVED: That the Northeastern Conference adopt the name "Eastland" as a uniform name for all hybrids developed in the cooperative program, this name to be followed by a number to identify individual hybrids.

Seconded and passed unanimously.

L. L. Huber

MOVED: That the Secretary be instructed to assign experimental N.E. designations to the hybrids predicted from the uniform tests of single crosses sponsored by the Northeastern Corn Conference. These are to be four-digit numbers, the first to indicate year, the second to indicate the uniform test, and the third third and fourth to indicate the 90 predicted hybrids.

Seconded and passed.

It was decided to use the seven maturity groups of single crosses agreed upon earlier and to allow for one group of single crosses earlier than W240 to be designated as Test No. 1, and to add Illinois 448 as Test No. 9. The complete list of uniform tests, therefore, is as follows:

<u>Uniform</u> <u>Test No.</u>	<u>Maturity</u>
1	-----
2	W240
3	W335
4	W412
5	M15
6	K24
7	Ia. 4059
8	U.S. 13
9	Ill. 448

Discussion developed as to the desirability of assigning experimental designations to the double crosses predicted from the 1946 uniform tests. Seed of many of these predicted doubles was produced in 1947 and was available for testing in 1948. It was agreed that the following designations should be assigned to the doubles predicted from the 1946 tests:

W412	N.E. 6401 - 6490
OhM15	N.E. 6501 - 6590
Ia. 939	N.E. 6701 - 6790
U. S. 13	N.E. 6801 - 6890
Ill. 448	N.E. 6901 - 6990

#### Maturity Designations for Regional Hybrids

The next item brought up for discussion was that of assigning maturity designations to the regional hybrids. There was considerable discussion as to the value of attempting to assign maturity designations to hybrids and to the difficulties involved in accurately determining maturity ratings. It finally was agreed that the most suitable procedure would be to select a group of standard hybrids of known maturities and classify maturities of new hybrids by comparing them with the standards. The set of hybrids used to indicate the maturities of the different uniform tests seemed entirely adequate for use as standards in determining the comparative maturity of double crosses.

B. L. Seem, therefore,

MOVED: That the Conference use the following hybrid numbers to designate the maturities of "Eastland" hybrids:

<u>Maturity</u>	<u>Range of Hybrid Numbers</u>
----	100 - 199
W240	200 - 299
W335	300 - 399
W412	400 - 499
M15	500 - 599
K24	600 - 699
Ia. 4059	700 - 799
U. S. 13	800 - 899
Ill. 448	900 - 999

Seconded and passed.

It was decided that any hybrids produced on the basis of the 1946 predictions should receive regional designations according to the above system.

Meeting adjourned for supper at 5:20 p.m.

EVENING MEETING, TUESDAY, FEBRUARY 17

The Conference had dinner at the University Commons. Immediately following dinner the meeting was called to order by Chairman Rothgeb at 7:30 p.m. Dr. Rothgeb asked M. T. Jenkins to review the present status of the cooperative regional project on corn improvement. Dr. Jenkins explained that the rough draft of the cooperative regional program developed at the New Brunswick meeting on February 18, 1947 had been assembled and edited by the Executive Committee consisting of R. G. Rothgeb, W. R. Singleton, L. L. Huber and himself and distributed to cooperators. At the request of Director Slate a brief statement of the project had been prepared and submitted to him for transmittal to the directors of the Northeastern region. Unfortunately, the directors had given it a rather low priority rating.

There was discussion as to the desirability of reviewing the proposed cooperative project, bringing it up to date and resubmitting it. L. L. Huber

MOVED: That the Conference continue to revise the regional project and keep it up to date until it finally is approved.

Seconded and passed.

Chairman Rothgeb appointed a nominating committee consisting of J. L. Cartledge, B. L. Seem and C. E. Phillips.

Meeting adjourned at 9:15 p.m.

MORNING MEETING, WEDNESDAY, FEBRUARY 18

The meeting was called to order by Chairman R. G. Rothgeb at 9:10 a.m. The first items of business were the reports of the committees on the uniform tests. These committees had met the previous evening to draw up plans for the 1948 and 1949 experiments.

Report of the Committee on the Uniform Test  
of W240 Maturity

R. M. Bailey reported for the Committee on the Uniform Test of W240 Maturity. H. M. Yegian was not present at the committee meeting. The following lines have been included in previous tests of this maturity group:

W85	ND273
W15	ND30
W-D	A158
W9	A116
A1311	A96
A1341	

No singles of W240 maturity are available for testing in 1948. The committee expects to review the situation with regard to this maturity group and prepare a series of crosses for testing in 1949 if there appears to be an adequate group of previously untested lines.

Report of the Committee on Uniform Tests  
of W335, W412 and M15 Maturities

L. L. Huber, Chairman of the Committee on Uniform Tests of W335, W412 and M15 Maturities reported for this committee. He indicated that the committee had reviewed the inbred lines available in the W335 and W412 maturity groups and had tentatively selected the following lines in these maturities:

<u>W335 Maturity</u>	<u>W412 Maturity</u>
W9	W9
W-M13	W-M13
W703	NY3
W83	W8
NY16	Id50
NY5	Pa31
SD105	Pa23
A96	Pa94
Pa41	MS19
Pa28	B8
	Pa71

The committee expects to review the above lines again before a final decision is reached on those to be used as parents. Single crosses among the lines in each of these maturity groups will be produced during the coming season.

No uniform set of single crosses of M15 maturity is planned for production during the coming season. The Pennsylvania station expects to make up a set of singles of this general maturity and these will be available for testing a year ahead of a regional set of this maturity.

Report of the Committee on Uniform Tests  
of K24 and Iowa 4059 Maturities

J. L. Cartledge, chairman of this committee, reported for the committee.



The seed supplies of single crosses of K24 maturity produced in 1947 were not adequate for uniform tests in 1948. Consequently the committee decided to hold over the seed produced in 1947, produce seed in 1948 to supplement the deficient entries, and test this group of singles in 1949. The inbred lines used as parents of the singles of this maturity are listed below:

Oh40B	W24
W22	WF9
W20	Oh33
B8	W-R3
Pa 109	Oh51A

The committee plans to produce seed of a group of single crosses of Iowa 4059 maturity in 1948 for testing in 1949. The following inbred lines have been tentatively selected as parents:

W24	Pa55
Hy	Oh51A
I205	R2
L289	W22
Oh56A	

The committee expects to review the above list of lines before final selection of the parent lines is completed.

Report of the Committee on Uniform Tests  
of U. S. 13 and Ill. 448 Maturities

Dr. J. C. Anderson, chairman of this committee, reported for the committee.

The committee plans to produce seed of a group of single crosses of U. S. 13 maturity in 1948 for testing in 1949. The following lines have been tentatively selected as parents of these singles:

WF9	I159
38-11	C103
Hy2	Oh45
R61	B2
J47	

No uniform test of single crosses of Ill. 448 maturity is planned for 1948 or 1949.

### Uniform Tests of Predicted Double Crosses

J. C. Anderson reported on the seed supplies of hybrids of U. S. 13 maturity predicted from the 1946 uniform test. Seed of several of these was produced at the New Jersey Agricultural Experiment Station and is available for testing in 1948. Some of these predicted hybrids will be included in the standard group of 25 double crosses to be handled by H. L. Everett of the Connecticut Agricultural Experiment Station. Dr. Anderson indicated that seed of these hybrids would be supplied to any station interested in testing them.

\* \* \* \* \*

At 10:30 Chairman Rothgeb introduced Director W. H. Martin who welcomed the group to the New Jersey Station and discussed the Research and Marketing Act of 1946. Director Martin discussed some of the difficulties experienced in getting the Act passed and outlined the distribution of the \$19,000,000 available for agricultural research this year. He also discussed the difficulties of interpretation as to what is "marketing" and what is "new research." The main difficulties are with 9(b)3 and 10(b) funds. Director Martin indicated that he has been acting as referee for the regional program on farm housing. He outlined some of the difficulties of supervising the functioning of research in this field in the different states.

Director Martin outlined how we might develop and fit together a regional project on corn improvement. He felt that we should first decide on a good research project for the region and then submit it for approval, first to the directors and then to the Committee of Nine. He suggested that we might want to set up inter-regional or national projects. He advised us to review our proposed regional project and again submit it to the Northeastern Directors for their consideration.

Following Director Martin's discussions Chairman Rothgeb called for reports of the various standing committees. The following report of the Committee on Uniform Tests of Field Corn was presented by L. L. Huber, Committee Chairman. Following Dr. Huber's report B. F. Coon presented a supplementary report on suggested methods of evaluating insect damage.

#### Report of Committee on Uniform Tests of Field Corn

1. The number of maturity groups to be tested shall be determined each year on the basis of need.
2. The number of entries in any maturity group shall be not over 25.
3. Tests may include both open and closed formula hybrids.
4. The number of closed formula hybrids included in any one maturity group shall not exceed four.
5. All closed formula hybrids must be strains widely distributed and grown in the Northeast.

6. Checks shall be open pedigree hybrids widely grown in the Northeast. Unless otherwise agreed upon the same strains shall be used each year.

7. New hybrids (open pedigree) shall be limited to those which have shown superior performance in their originating states and/or hybrids which, on the basis of adequate all possible combination single cross tests, show superior performance.

8. Experimental design---triple lattice or other design acceptable to cooperating states.

9. Data to be taken---yield, moisture at harvest, root lodging, stalk breakage below ear, and additional data---stalk rot, blight, smut, aphids, borers, root-worm, drought and nutrient deficiency.

10. Insect, disease, and nutrient deficiency data shall be taken in accordance with suggestions made by entomologists, pathologists and physiologists.

Supplementary report on suggested methods of evaluating insect injury to corn strains in the North Eastern region of the United States.  
The following report is an incorporation of the tentative methods of the North Central States region, and those used in Pennsylvania:

Coding entire plots for specific insect injury is common in corn investigations. Its greatest advantage lies in the rapidity of examination. Both strain resistance and strain tolerance can be evaluated. Investigators should first determine the range of injury in a given strain and then proceed with the ratings of plots as indicated.

European Corn Borer, Pyrausta nubilalis Hubn.

Strain Resistance (Relative ability of the strain to escape borer feeding.)

1. Rate strains from 1 (least borer injury) to 9 (most severe borer injury) by designating first whether the injury is low, medium or high and then further classifying into the final classes as follows:

A. Low

- a. Low-low - Class 1
- b. Low - Class 2
- c. High-low - Class 3

B. Medium

- a. Low-Medium- Class 4
- b. Medium - Class 5
- c. High-Medium Class 6

C. High

- a. Low-High - Class 7
- b. High - Class 8
- c. High-High Class 9

or use number 2 below.



2. Rate strains from 1 (least borer injury) to 5 (most severe borer injury) as follows:
  1. Very low
  2. Low
  3. Medium
  4. High
  5. Very high
3. If first generation borers are absent from experimental plots, readings on aphid infestation may be used to indicate relative resistance of corn strains.
4. Records should not be taken later than the early roasting ear stage. In making ratings, observe leaf injury, exuded frass, feeding on leaf sheath and at ligule.

Strain Tolerance. (Relative ability of strain to withstand injury in spite of borer feeding.)

1. Rate strains from 1 to 9 as under strain resistance (number 1 above) or, from 1 to 5 as above (number 2).
2. Record should be taken just before harvest. Observe stalk breakage, detasseling, broken ear shanks and broken leaves, or use number 3 below.
3. Instead of the rating system of 1 and 2 above stalk breakage below the ear may be determined by actual count and computed to percentage stalks broken below ear, as strain tolerance. It is possible to determine the breakage due to borer and to stalk rot separately, and this should be done.
4. When both early and late strains occur in the same test, some allowance should be made for differences that are only apparent since late maturing strains will show to some advantage.

#### Corn Leaf Aphid, (Aphis maidis Fitch)

1. Evaluate aphid infestations on a 1 to 9 or on a 1 to 5 basis as described under corn borer resistance. By this method both percent stalks infested and size of aphid colonies can be taken into account, or use number 2 below.
2. Evaluate aphid infestations by actual count of plants per plot containing an aphid colony, and computing to percent of stalks infested.
3. It is important that aphid records be taken soon after tassel emergence.
4. Qualifications should be made for extremely early and extremely late strains in case there is a marked difference in the time of tassel appearance in a given test.
5. The percent of barren plants in which barrenness is due to aphid investment should be taken just prior to harvest. This is an additional aphid count and should be taken even though an earlier count has been obtained on aphid colonies.



### Corn Rootworms, Diabrotica Spp.

In years of rootworm abundance, corn is injured early in the season and rootworm symptoms may appear on susceptible plants during July. Characteristic symptoms appear first as plant lodging, followed by a "bowing" of the stalk as it assumes its upright growth. The degree of "bowing" will be dependent upon the degree of original root lodging.

1. Rootworm resistance may be evaluated by a strain rating of 1 to 5 or 1 to 9 as described under borer resistance, or use number 2 below.
2. Rootworm resistance may be evaluated by making an actual count of plants showing rootworm symptoms, and converting to percentage.
3. Record the percent of plants lodged to 30 degrees or more from the verticle (indicated by the minute hand at 5 minutes after the hour). This record may include root weaknesses other than rootworm susceptibility, but gives a good value of root character at harvest time.

### Other Corn Insects

Methods of evaluating injury of the following insects are being prepared and will be presented at a later date when the methods have been agreed upon:

Thrips	Chinchbug	Grasshoppers
Flea beetles	Grape Colaspis	Southwestern stalk
Earworms	White Grubs	borer

Submitted by

B. F. Coon  
H. L. Everett  
C. M. Haenseler  
R. G. Wiggins  
L. L. Huber, Chairman

L. L. Huber

MOVED: That the report be accepted.

Seconded and passed.

### Report of the Committee to Formulate a Uniform Policy on the Release and Distribution of Inbred Lines

A primary objective of the Northeastern Corn Improvement Conference is the promotion of a free interchange of breeding materials among the co-operating State and Federal experiment stations in the Northeast and between these agencies and those that are members of the North Central Corn Improvement Conference. The establishment of a uniform policy governing the release and distribution of inbred lines would greatly facilitate this free and unrestricted interchange of breeding materials. The following uniform policy, patterned after the "delayed release" policy now in operation in the North Central Corn Improvement Conference, is suggested with the hope that it will be adopted by each of the cooperating State and Federal agencies:

1. Inbred lines developed by a cooperating experiment station shall remain under the control of the station, that is they shall not be released to private individuals or concerns, until such time as they demonstrated their value in a hybrid. When a new inbred line has met this requirement it shall be released to private individuals and seed companies.
2. One of the requirements of demonstrating the value of an inbred line in a hybrid shall be not less than 2 years of seed production of the hybrid on a field scale in a manner such as it would be produced commercially.
3. When an inbred line is released, the station making the release shall undertake to make provision for the servicing of eligible producers wherever they may be located. The amounts of seed supplied to out-of-state producers may be limited, when necessary, to "germ plasm" amounts of 25 to 50 seeds.
4. Inbred lines developed by any of the cooperating agencies shall be freely interchanged with other State and Federal experiment stations with the understanding that they shall not be sub-released to private individuals or concerns without the prior consent of the originating station.
5. Any State or Federal experiment station receiving unreleased lines from another cooperating station or agency shall assume the obligation of using all reasonable precautions to avoid the possibility of such lines getting into the hands of persons not authorized to have them.
6. Seed of such foundation single crosses involving unreleased inbred lines as may be needed to establish the value of an experimental hybrid, shall be produced by the experiment station or under the direct control of the experiment station. This seed may be sold by the experiment station to growers for the production of the recommended experimental double cross.
7. Provision shall be made for the commercial production of double-crossed seed and the certification of properly produced seed. One of the provisions of certification shall be an established record of performance within the State.

Respectfully submitted,

R. G. Wiggans, Chairman  
J. C. Anderson  
M. T. Jenkins  
B. L. Seem

R. G. Wiggans

MOVED: That the report be accepted and that the committee be discharged.

R. G. Wiggans then

MOVED: That the Secretary be instructed to call this report to the attention of all the station directors and request their favorable consideration.

Seconded and passed.

Report of the Committee  
on the Uniform Designation of Hybrids

Standards to be met relative to acceptance of new double crosses with "Eastland" designation:

1. Before a hybrid can be called "Eastland" the single crosses must have been tested in at least 3 locations and predictions made.
2. There should be a minimum of 10 tests of the hybrid conducted over a period of 2 years.
3. If it has not been produced via the single cross route it must be tested in a minimum of 15 tests over a 3 year period.
4. It is recommended that the hybrid be tested in groups to reduce experimental error.
5. Performance records shall be presented of double cross combinations in comparison with check strain in its maturity group.
6. Description of performance of inbreds and seed parents composing the hybrid shall be presented.
7. Performance data:

A hybrid shall be equal to check in yield and the committee shall exercise its judgment in evaluating the hybrid with respect to other important characteristics such as:

resistance to insects.  
" " diseases  
" " lodging  
drought tolerance  
etc.

8. The new hybrid must have been produced in sufficient quantity to permit extensive testing the third year and also some small field scale plantings.

J. C. Anderson, Chairman  
L. L. Huber  
R. G. Wiggans



It was

MOVED: That the report be accepted as read.

Seconded and passed.

R. G. Wiggans

MOVED: The discharge of the present committee and the appointment of a new committee charged with the assignment of proper maturity ratings to hybrids and with the duty of reviewing applications and recommending the assignment of regional designations as "Eastland" hybrids.

Seconded and passed.

Report of Committee on  
Sweet Corn Investigations

During the past year, two lines of cooperative sweet corn investigations were undertaken through the sweet corn Committee. A brief discussion of these follows:

1. Study of Adaptation of Sweet Corn Hybrids and Inbreds throughout the Northeast. Twelve hybrids and ten inbreds contributed by the Maryland, New Jersey, Pennsylvania, Connecticut and Maine experiment station were distributed for trial to Maine, Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, and Maryland. The hybrids comprised garden and canning types. Mimeographed forms designed to obtain uniform data were supplied to each worker for reporting the results. The need for this was evidenced by the diversity of data supplied by investigators who reported on a similar trial conducted in 1946. An attempt was made to make the data sheet as comprehensive as practical to cover such characters as silking dates, vigor, uniformity, ear and kernel characters and diseases. These data have not yet been completely analyzed. Perhaps this cooperative study has contributed most by stimulating a more extensive exchange of hybrids and breeding stocks among workers and in the taking of more uniform data.

2. Quality Comparisons in Sweet Corn and Objective Methods for Determining Quality. The need for stressing selection for high quality sweet corns has been pointed out in previous reports to this Conference. New developments in marketing the fresh product, the expansion of home and industrial freezing and competition in and with the canning industry are among the factors tending to make the consuming public more quality conscious. Each type of marketing demands somewhat different characters in the raw product. Sweet corn breeders need better objective methods for the evaluation of quality. Dr. Singleton and Dr. Snell have conducted studies on this problem during the past year.

Respectfully submitted,

R. M. Bailey, Chairman



R. S. Snell and W. R. Singleton reported on studies of pericarp thickness and quality in sweet corn.

It was

MOVED: That the report be approved.

Seconded and passed.

Report of Committee on  
Statistical Designs

The committee indicated they had no formal report to make at this time.

\* \* \* \* \*

Chairman Rothgeb then called for a report of the Nominating Committee. The committee nominated J. C. Anderson as vice-chairman and recommended that M. T. Jenkins continue as Secretary.

MOVED: That the report be adopted and the Secretary be instructed to cast a unanimous ballot for these nominees.

Seconded and passed

W. R. Singleton, vice-chairman in 1947, automatically became the new chairman. He discussed the possibility of a summer meeting in 1948. In view of the numerous summer meetings already scheduled for this year there was some question as to the advisability of trying to schedule a summer meeting of the Northeastern Conference this year. It was

MOVED: That the question of a summer meeting be left in the hands of the Executive Committee.

Seconded and passed.

The question of resubmitting the regional project was discussed. It was decided to rework the regional project and to resubmit it next year. This was to be done by the Executive Committee. It was

MOVED: That a vote of thanks be extended to J. C. Anderson and the New Jersey staff for the arrangements they had made to facilitate the meeting at New Brunswick.

Seconded and passed.

Meeting adjourned at 12:15.

ROSTER OF ATTENDANCE

Connecticut, New Haven

Everett, H. L., Connecticut Agricultural Experiment Station  
Singleton, W. R., " " " "

Delaware, Newark

Phillips, C. E., Delaware Agricultural Experiment Station

Maine, Orono

Bailey, R. M., Maine Agricultural Experiment Station

Maryland

Jenkins, Morle T., Plant Industry Station, Beltsville  
Rothgeb, R. G., Maryland Agricultural Experiment Station, College Park

New Hampshire, Durham

Higgins, L. J., New Hampshire Agricultural Experiment Station

New Jersey, New Brunswick

Snell, R. S., New Jersey Agricultural Experiment Station  
Anderson, J. C. " " " " "  
Haenseler, C. M. " " " " "

New York, Ithaca

Randolph, L. F., U.S.D.A. and Cornell University  
Wiggans, R. G., Cornell University

Ohio, Wooster

Stringfield, G. H., Division of Cereal Crops and Diseases, U.S.D.A.

Pennsylvania

Huber, L. L., Pennsylvania Agricultural Experiment Station, State College  
Coon, B. F., Pennsylvania State College, Tobacco Experimental Laboratory, Lancaster  
Seem, B. L., Pennsylvania Agricultural Experiment Station, State College

Virginia, Blacksburg

Genter, C. F., Virginia Agricultural Experiment Station

West Virginia, Morgantown

Ritter, Blair M., West Virginia Agricultural Experiment Station  
Cartledge, J. L. " " " " "

Canada, Ottawa

Dimmock, F., Central Experimental Farm

OFFICERS AND COMMITTEE MEMBERSHIP, 1948

Referee - W. L. Slate

Executive Committee

Chairman - W. R. Singleton  
Vice Chairman - J. C. Anderson  
Member-at-large - R. G. Rothgeb  
Secretary - M. T. Jenkins

Committee on Uniform Tests of Field Corn

L. L. Huber, Chairman C. M. Haenseler  
B. F. Coon R. G. Wiggans  
H. L. Everett

Committee on the Registration of "Eastland" Hybrids

D. F. Jones, Chairman  
L. L. Huber  
R. G. Rothgeb

Committee on Sweet Corn Investigations

R. G. Rothgeb, Chairman M. T. Lewis  
R. M. Bailey W. R. Singleton  
C. H. Dearborn R. S. Snell  
W. H. Lachman

Committee on Statistical Designs  
for the Uniform Comparisons

C. E. Phillips, Chairman  
C. I. Bliss  
H. M. Yegian

Committees on Uniform Tests of Hybrids

W240 Maturity ) H. M. Yegian, Chairman : K24 and ) J. L. Cartledge, Chairman  
R. M. Bailey : Ia. 4059 ) H. L. Everett  
: Maturities)  
W335, W412 and) L. L. Huber, Chairman :  
M15 Maturities) R. G. Wiggans : U.S.13 and) J. C. Anderson, Chairman  
H. M. Yegian : Ill. 448 ) R. G. Rothgeb  
: Maturities) H. L. Everett

LIST OF NORTHEASTERN EXPERIMENT STATIONS

Connecticut	Maryland	Pennsylvania
Delaware	New Hampshire	Rhode Island
Maine	New Jersey	Vermont
Massachusetts	New York	West Virginia

